ERADICATION OF SILVER PHEASANTS, LOPHURA NYCTHEMERA (L) FROM PORONGURUP NATIONAL PARK, WESTERN AUSTRALIA

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ABSTRACT

Long (1981) summarised the establishment and eradication of a small but rapidly increasing population of Silver Pheasants (Lophura nycthemera L.) from Porongurup National Park, south-western Western Australia. Nevertheless many people remain unaware of the incident. This note records the event in more detail, particularly the strategy used to eradicate the population, and warns of the potential for this species to establish feral populations in wet selerophyll forests in the State.

INTRODUCTION

European settlement, numerous exotic bird species have established wild populations in Australia (Long 1981). Western Australia (WA) has remained free of the nation's most serious exotic avian pests, European Starlings and House Sparrows. because of vigilance for and eradication of pioneering flocks, particularly starlings, arriving by ship or making their way west across the Nullarbor from South Australia. Never-theless, through deliberate or accidental release. exotic many species have established populations in the State's southwest (Long 1981, Johnstone and Storr 1998). They

include species from overseas (e.g. turtle doves, mallard), elsewhere in Australia (e.g. Rainbow Lorikeets, Laughing Kookaburra, Eastern Long-billed Corella) and elsewhere in the State (e.g. Little Corellas in Perth).

Although numerous introductions to WA have failed (Long 1981), there are few examples of exotic species that have been intentionally eradicated. An exception has been the elimination of flocks of sparrows and starlings, effectively eradicating founding populations from WA. However. at a continental scale, this amounts to an example successful containment and the threat of reinvasion remains because eradication

Australia is not presently a realistic option.

Another Western Australian example, the eradication of a population of Silver Pheasants (Lophura nycthemera; Phasianidae) from the Porongurup Range in south-western WA was briefly reported by Long (1981). Nevertheless, few people are aware of that incident and Long did not report on the methods used. The purpose of this note is to place the details on the record.

METHODS

HISTORY

In 1976, David McNamara of Mt. Barker, Western Australia, reported to the State's National Parks Board (NPB) that Silver Pheasants were living in Porongurup National Park. They had been seen in the area of Devil's Slide, Wansborough Walk and the Tree-in-the-Rock picnic site. These sites are all located along the track that follows the Bolganup Valley and crosses the saddle at its head. McNamara thought that the birds had been released from the Spearwood Gardens Tearooms when the business closed "about three years ago" or were their descendants. On 5 May 1976, Harry Gorringe, then Managing Secretary to the NPB, wrote to George Andrews, National Park Ranger based in Albany (there was no resident ranger in the Porongurup National Park at that time) seeking "comment on the matter and the most feasible method to eradicate the birds" (Gorringe 1976).

Andrews (1976) responded that he

had reported one bird on Wansborough Walk "in one of my monthly returns last year" and the best option eradication would be shooting. Trapping would be doubtful and poison was "of course out of the question". However, action was postponed so that more information on the numbers and distribution of pheasants in the area could be collected and an effective strategy devised. I undertook that task.

Local residents told me that five silver pheasants had been left to fend for themselves when the tearooms closed and many park visitors told me that they had seen silver pheasants in the area that McNamara reported them, but nowhere else (Start, 1976). Nevertheless most visitor facilities were located in that valley and few people ventured elsewhere. The maximum number of birds seen simultaneously by anyone had been six, a 'silver' cock and five brown birds that were presumed to be hens. All sightings had been in wet sclerophyll forest dominated by Karri (Eucalyptus diversicolor) over a dense understory. The NPB, with support from the State's agricultural protection wildlife conservation agencies. but some -Toca1 opposition (because the pheasants were seen as a harmless tourist attraction) resolved to eradicate them when the Park's first resident ranger took up duties later that year.

ERADICATION

Ranger Roy Harris commenced control actions in summer, 1977.

From February, he opportunistically shot birds. As there had been an apparent imbalance of sexes favoring females he focused on trying to eliminate one sex, males. In March, he and Start set up six bait stations, three on each side of the valley and several hundred metres from facilities areas. At each station, wheat was scattered over raked ground. The stations were examined for pheasant tracks and the bait replenished regularly. There was to be no shooting in their vicinity, even if pheasants were sighted.

A funnel trap was constructed at one bait-station which pheasants habitually used. It was made from chicken-wire and measured approximately 2x2 m by 1 m high. Semicircular holes measuring approximately 30x30 cm were cut at ground level in each side. For about one month pheasants could freely enter and leave the enclosure. During that time, wheat was progressively concentrated within the cage. In late June, when it was apparent that the birds were accustomed to foraging within the enclosure. tapered chicken-wire 'funnels' leading into the enclosure were fixed into each of the four openings.

RESULTS

Table 1 shows details of the pheasants that were removed. No birds have been reported since June 1977. Trapped birds were donated to Perth Zoo.

DISCUSSION

There are two interesting aspects to the incident. Firstly, it is remarkable that a population of large, ground-nesting birds was able to increase from five to at least eighteen in three or four (and there were vears substantiated rumors another ten had been shot before Harris arrived). Many groundnesting birds have declined in Australia, including the southwest of WA where predation by European foxes and feral cats has often been implicated as contributory factor (Garnett and Crowley 2000). Foxes and cats are present in the area and there was no predator control program in Porongurup National Park at that time. Many pheasants roost in trees. If the Silver Pheasants did so, the habit would have protected them from cats and foxes at night but incubating birds and chicks presumably still would

Table 1. Silver pheasants removed from Porongurup National Park in 1977.

Date	Number of birds taken	Method
Feb 1977	l silver male	Shot
March 1977	2 silver males	Shot
April 1977	2 silver males + 1 brown (? female)	Shot
May 1977	4 birds, sex not recorded	Shot
June 1977	2 silver males + 6 brown birds (? females)	Trapped
TOTAL	7 silver +7 brown + 4? = 18	10 shot + 8 trapped

vulnerable. Moreover, those predators are sometimes active in daylight. The pheasants' ability to avoid predation may have been enhanced by the dense understory associated with the Karri (Eucalyptus diversicolor) forest in which they lived.

Secondly, although the actual number of birds of known sex was even (assuming brown birds were females), no observers saw more than one silver bird at a time but on more than one occasion at least six brown birds had been seen in the company of a silver bird. Thus sight records gave a heavily biased impression of the actual sex ratio of the whole population.

The long-term prognosis for the population, had we not Intervened, will always be unknown. Long (1981) records many Western Australian examples of initially successful introductions that eventually failed. It is easy to imagine situations in the Porongurup Range that could have caused the demise of pheasants. For instance, an extensive fire in the Karri forest could have increased exposure to exotic predators by destroying cover or forcing them into the adjacent, more open Jarrah (Eucalyptus marginata) forest.

Be that as it may, this case shows that silver pheasants have the potential to establish in some wet sclerophyll forests of southwestern WA. If they succeeded, the impact of their presence is unknown, but we have learned from bitter experience that many ostensibly benign animals have become economically and environmentally costly pests. In

future, Silver Pheasants should be regarded as a potential pest species and any feral birds should be eradicated as soon as possible.

ACKNOWLEDGEMENTS

I am grateful to Roy Harris for his dedication to the eradication of Silver Pheasants from the Porongurup National Park and his family for friendship and support in the field. I am also grateful to John Blythe and Allen Burbidge for their constructive comments on an earlier draft of the manuscript.

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